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PCT09

RAW SEQUENCE LISTINGPATENT APPLICATION: US/09/914,541

DATE: 01/15/2002

TIME: 13:04:25

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Output Set: N:\CRF3\01152002\1914541.raw

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3 <110> APPLICANT: THE UNIVERSITY OF TENNESSEE RESEARCH CORPORATION
         BECKER, JEFFREY M.
 4
 5
         HAUSER, MELINDA
         DONHARDT, AMY
 7
         BARNES, DAVID
 9 <120> TITLE OF INVENTION: EUKARYOTIC PEPTIDE UPTAKE SYSTEM FOR TRANSPORTING
10
         ENKEPHALINS
12 <130> FILE REFERENCE: 1046-PCT-00
14 <140> CURRENT APPLICATION NUMBER: 09/914541
15 <141> CURRENT FILING DATE: 2001-08-29
17 <150> PRIOR APPLICATION NUMBER: PCT/US00/05158
18 <151> PRIOR FILING DATE: 2000-03-01
20 <150> PRIOR APPLICATION NUMBER: 60/122,312
21 <151> PRIOR FILING DATE: 1999-03-01
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90 Ala Thr Thr Asp Glu Glu Asp Arg Asp Pro Glu Ser Gln Lys Phe Asp
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93 Arg His Ser Ile Gln Glu Glu Gly Leu Val Trp Lys Gly Asp Pro Thr
96 Tyr Leu Pro Asn Ser Pro Tyr Pro Glu Val Arg Ser Ala Val Ser Ile
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108 Cys Tyr Pro Ile Gly Arg Ile Leu Ala Leu Leu Pro Asp Trp Lys Cys
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Input Set : A:\09914541.app
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126 127	Ser	Ser	Ile	Trp	Pro 245	Gln	Thr	Leu	Ile	Ser 250	Val	Ser	Leu	Phe	Asp 255	Ser
	T. 211	Hic	Sor	Δra		Va 1	Glu	T.ve	Thr		λla	λen	Gly	Trp		Mot
130	пси	1115	JCI	260	Lys	74.1	Olu	цу	265	vul	niu	ASH	017	270	1111	MCC
	Dro	Δνα	Тυν		Dha	Dho	T.A.II	т1Д		Τ.Δ13	Tla	Glv	Sar	Phe	т1Б	Trn
133	110	пту	275	Arg	FIIC	riic	пец	280	vai	пец	TTE	GIY	285	riie	116	шР
	Фил	Пхх		Dro	Clyr	Dha	Tou		mb~	C1.,	Lou	602		Dho	λαη	37 a 1
136	TÄT	290	Val	PIO	GIY	Pile	295	Pile	1111	GTA	ьeu	300	тут	Phe	ASII	Val
	Tla		Пип	C1	Cor	T		7 ~~	II i a	N a n	Dho		7 l n	N an		т1.
	305	ьeu	ттр	вту	ser	_	THE	Arg	HIS	ASII		TTE	Ald	Asn	THE	
		c1	mh -	61 m	0	310	T	<i>c</i> 1	31 -	T	315	т1.	mh	Dha	3	320
141	Pile	СТУ	1111	GIII	325	GIA	Leu	СТУ	Ата		PIO	TTE	1111	Phe	335	тут
	Пhъ	<i>0</i> 15	17-7	Com		3 l o	Wa+	Com	C1	330	17-7	Dho	7.1.	шhъ		Dha
145	1111	GIII	val	340	GIII	нта	Met	ser	345	ser	val	Pile	Ата	Thr 350	PIO	Pne
	П	370 7	000		7 ~ ~	m h	Ш	71.		170]	T 0	т1.	Dha	Phe	170]	T1.
148	тут	vai	355		ASII	1111	тут	360		val		TIE	365		val.	iie
	Wa 1	T 011			T 011	M	Dha					Птт				Wo+
151	Val	370	PIO	Cys	Leu	TAT	375			1111	пр	380	Ата	Lys	тут	мес
	Dwo		т1-	Com	C1	Com			3 an	A an	mh w		7	T ***	Ш	7
		Val	тте	ser	СТА		1111	TAL	ASP	ASII	395	GIII	ASII	Lys	тут	
	385	mhm	T	т1а	τ	390	c1	7 00	m	Com		7	T 011	Glu	T ***	400
	vaı	THI	ьуѕ	тте		ASII	GIU	ASP	туг	410	тте	ASI	ьeu	GIU	_	туг
157	T *** G	01 11	M	C	405	370]	Dha	17-1	Dma		Com	TT	T	T	415	m
	гуѕ	GIU	тÀт	420	PIO	Val	Pne	vaı	425	Pne	ser	TAT	Leu	Leu	ser	TAT
160		т	7		71-	3 1.	17 n 1	т1.		17- 1	Dha	37 - 3	11 i a	430	т1.	T 0
163	Ата	ьeu	435	Pne	Ala	Ата	val	440	Ата	val	Pne	val		Cys	тте	Leu
		II i a		Ta	7	т1.	375.1		T	Dha	T	7 00	445	T	N a m	C1
166	тут	450	СТУ	гуѕ	ASP	116	45.5	Ата	гаг	Pile	_	460	Arg	Lys	ASII	GTY
	C1 **		λαν	T10	Пiс	Mot		T10	Mrr.	Cor			П	T 110) an	Cua
	465	1111	ASP	ire	птъ	470	AIG	116	тут	ser	475	ASII	тут	Lys	ASP	480
		7	m~~	m	П		T	T 0	~1 ~	т1.		Wat	т1.	C1	T 0	
172	PIO	ASP	ттр	пр	485	Leu	Leu	ьeu	GTII	490	Val	мес	TIE	Gly	495	GIY
	Dho	Wa 1	712	1/2.1		CTTC	Dho	Nan	Пhr		Dho	Dro	715	T ren		Dho
175	Pile	Val	Ата	500	Cys	Cys	Pile	ASP	505	гуѕ	Pne	PIO	Ата	Trp 510	Ата	Pne
	บาไ	Tlo	71-		Ton	Tla	Cor	Ť OU		A a n	Dho	т1о	Dwo		C111	тъ
178	Val	TTE	515	TTE	Leu	TIE	Set	520	Val	ASII	Pile	116	525	Gln	СТА	116
	T 011	C1.,		Wot	mb ~	7.00	C15		1701	C1	Tan	ħ a n		т1.	mh ~	C1
	Leu		АТа	Met	1111	ASII	535	птѕ	vai	СТУ	reu	540	116	Ile	1111	GIU
181	T 011	530	Crra	C1	m	Wat		Dwo	T 0.11	7 ~~~	Dwo		7 1 a	N a n	T 0.11	T 011
		тте	Cys	СТА	TAT	550	Leu	PIO	Leu	Arg		Mec	Ата	Asn	Leu	
184		T ***	T 0	M	C1		т1.	1703	Ma+	3	555	C1	T 0	3 an	T 011	560
	Pne	гуѕ	ьeu	TAT	565	Pne	тте	vaı	мес		GIII	СТУ	reu	Asn	575	ser
187	7 22 22	N = =	T 0.11	T *** a	-	7 l a	Wat	m	Wat	570	17n 1	0	Dwo	λ		т1.
	AIG	ASP	Leu	_	ьеи	нта	Met	IÀI		цуѕ	val	ser	PIO	Arg	ьeu	тте
190	Dha	7 J ~	W = 1	580	т1 ^	П	. ה ה	πh∽	585	т1 ~	C.~	C1	Mot	590	λ ~ ~	17-1
	FIIE	мта	595	GIII	тте	тАт	нта	600	тте	тте	26I	ату		Val	ASII	٧aı
193	C1	17 ~ 1		C1	ш~~	Mo+	Mot		7~~	Tl a	7.00	C1	605	Crrc	mb~	mb~
	ату		GTII	GIU	ттЬ	rie C	мес 615	птр	ASII	тте	изр		Leu	Cys	T IIT.	TIIT
196	λας	610	Dro	λαν	C1**	Dha		Cva	7 J -	λ c ~	C1	620	mh∽	V-1	Dha	λαν
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RAW SEQUENCE LISTING DATE: 01/15/2002 PATENT APPLICATION: US/09/914,541 TIME: 13:04:25

Input Set : $A:\09914541.app$

Output Set: N:\CRF3\01152002\1914541.raw

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223			755		-1-			760		1	1	-1-	765			টুক্দ
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226	011	770				2,5	775		-1-			780	- 1		270	
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237 238 239 241 242 244 245 247 248 250 251 253	<400 Met 1 Ser Pro Leu Val 65	<pre>D> SI Val Lys Ile Pro 50</pre>	EQUENT Gly Ile Glu 35 Val Leu	Val 20 Glu Leu Ala	3 Leu 5 Ile Val Thr Phe	Glu Ala Arg Phe Val 70	Val Asp Leu Arg 55 Asn	Ser Glu Thr 40 Thr	Lys Glu 25 Val Trp Phe	Pro 10 Glu Pro Phe Phe	Glu Ile Leu Gly 75	Asp Thr Gly 60 Tyr	Glu Asp 45 Met Arg	Asn 30 Asp Val Ser	15 Asp Pro Ser Asn Leu	Ser Ser Cys Pro 80
237 238 239 241 242 244 245 247 248 250 251 253 254	<pre><400 Met 1 Ser Pro Leu Val 65 Leu</pre>	O> SI Val Lys Ile Pro 50 Val	EQUENT Gly Ile Glu 35 Val Leu Val	Val 20 Glu Leu Ala Ser	3 Leu 5 Ile Val Thr Phe Ser .85	Glu Ala Arg Phe Val 70 Val	Val Asp Leu Arg 55 Asn Val	Ser Glu Thr 40 Thr Asn	Lys Glu 25 Val Trp Phe Gln	Pro 10 Glu Pro Phe Phe	Glu Ile Leu Gly 75 Ile	Asp Thr Gly 60 Tyr Thr	Glu Asp 45 Met Arg Leu	Asn 30 Asp Val Ser	15 Asp Pro Ser Asn Leu 95	Ser Cys Pro 80 Gly
237 238 239 241 242 244 245 247 248 250 251 253 254 256	<pre><400 Met 1 Ser Pro Leu Val 65 Leu</pre>	D> SI Val Lys Ile Pro 50 Val	EQUENT Gly Ile Glu 35 Val Leu Val	Val 20 Glu Leu Ala Ser	3 Leu 5 Ile Val Thr Phe Ser .85	Glu Ala Arg Phe Val 70 Val	Val Asp Leu Arg 55 Asn Val	Ser Glu Thr 40 Thr Asn	Lys Glu 25 Val Trp Phe Gln Thr	Pro 10 Glu Pro Phe Phe	Glu Ile Leu Gly 75 Ile	Asp Thr Gly 60 Tyr Thr	Glu Asp 45 Met Arg Leu	Asn 30 Asp Val Ser Pro	15 Asp Pro Ser Asn Leu 95	Ser Cys Pro 80 Gly
237 238 239 241 242 244 245 247 248 250 251 253 254 256 257	<pre><400 Met 1 Ser Pro Leu Val 65 Leu Lys</pre>	O> SI Val Lys Ile Pro 50 Val Thr	EQUEN Gly Ile Glu 35 Val Leu Val	Val 20 Glu Leu Ala Ser Ala	Jeu 5 Ile Val Thr Phe Ser 85	Glu Ala Arg Phe Val 70 Val Thr	Val Asp Leu Arg 55 Asn Val Leu	Ser Glu Thr 40 Thr Asn Ala Pro	Lys Glu 25 Val Trp Phe Gln Thr 105	Pro 10 Glu Pro Phe Phe 11e 90 Thr	Glu Ile Leu Gly 75 Ile Lys	Asp Thr Gly 60 Tyr Thr	Glu Asp 45 Met Arg Leu Arg	Asn 30 Asp Val Ser Pro Leu 110	15 Asp Pro Ser Asn Leu 95 Pro	Ser Ser Cys Pro 80 Gly Gly
237 238 239 241 242 244 245 247 248 250 251 253 254 256 257 259	<pre><400 Met 1 Ser Pro Leu Val 65 Leu Lys</pre>	O> SI Val Lys Ile Pro 50 Val	EQUENCE Gly Ile Glu 35 Val Leu Val Met	Val 20 Glu Leu Ala Ser Ala	Jeu 5 Ile Val Thr Phe Ser 85	Glu Ala Arg Phe Val 70 Val Thr	Val Asp Leu Arg 55 Asn Val Leu	Ser Glu Thr 40 Thr Asn Ala Pro Asn	Lys Glu 25 Val Trp Phe Gln Thr 105	Pro 10 Glu Pro Phe Phe 11e 90 Thr	Glu Ile Leu Gly 75 Ile Lys	Asp Thr Gly 60 Tyr Thr	Glu Asp 45 Met Arg Leu Arg	Asn 30 Asp Val Ser Pro Leu 110	15 Asp Pro Ser Asn Leu 95 Pro	Ser Ser Cys Pro 80 Gly Gly
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237 238 239 241 242 244 245 247 248 250 251 253 254 256 257 259 260 262	<pre><400 Met 1 Ser Pro Leu Val 65 Leu Lys Thr</pre>	O> SI Val Lys Ile Pro 50 Val Thr Leu Asn	EQUENCE Gly Ile Glu 35 Val Leu Val Met Trp 115	Val 20 Glu Leu Ala Ser Ala 100 Ser	Jeu 5 Ile Val Thr Phe Ser 85 Thr Cys	Glu Ala Arg Phe Val 70 Val Thr	Val Asp Leu Arg 55 Asn Val Leu Leu Phe	Ser Glu Thr 40 Thr Asn Ala Pro Asn 120	Lys Glu 25 Val Trp Phe Gln Thr 105 Pro	Pro 10 Glu Pro Phe Phe 11e 90 Thr	Glu Ile Leu Gly 75 Ile Lys Pro	Asp Thr Gly 60 Tyr Thr Leu Phe	Glu Asp 45 Met Arg Leu Arg Asn 125	Asn 30 Asp Val Ser Pro Leu 110 Met	15 Asp Pro Ser Asn Leu 95 Pro	Ser Cys Pro 80 Gly Gly Glu
237 238 239 241 242 244 245 247 248 250 251 253 254 256 257 260 262 263	<pre><400 Met 1 Ser Pro Leu Val 65 Leu Lys Thr His</pre>	D> SI Val Lys Ile Pro 50 Val Thr Leu Asn Val 130	GQUEN Gly Ile Glu 35 Val Leu Val Met Trp 115 Leu	Val 20 Glu Leu Ala Ser Ala 100 Ser	Jeu 5 Ile Val Thr Phe Ser 85 Thr Cys	Glu Ala Arg Phe Val 70 Val Thr Ser	Val Asp Leu Arg 55 Asn Val Leu Leu Phe 135	Ser Glu Thr 40 Thr Asn Ala Pro Asn 120 Ala	Lys Glu 25 Val Trp Phe Gln Thr 105 Pro Asn	Pro 10 Glu Pro Phe Phe Ile 90 Thr Gly	Glu Ile Leu Gly 75 Ile Lys Pro Gly	Asp Thr Gly 60 Tyr Thr Leu Phe Ala 140	Glu Asp 45 Met Arg Leu Arg Asn 125 Gly	Asn 30 Asp Val Ser Pro Leu 110 Met	15 Asp Pro Ser Asn Leu 95 Pro Lys Ala	Ser Cys Pro 80 Gly Gly Glu Tyr
237 238 239 241 242 244 245 247 248 250 251 253 254 256 257 260 262 263 265	<pre><400 Met 1 Ser Pro Leu Val 65 Leu Lys Thr His Ala</pre>	O> SI Val Lys Ile Pro 50 Val Thr Leu Asn	GQUEN Gly Ile Glu 35 Val Leu Val Met Trp 115 Leu	Val 20 Glu Leu Ala Ser Ala 100 Ser	Jeu 5 Ile Val Thr Phe Ser 85 Thr Cys	Glu Ala Arg Phe Val 70 Val Thr Ser Ile	Val Asp Leu Arg 55 Asn Val Leu Leu Phe 135	Ser Glu Thr 40 Thr Asn Ala Pro Asn 120 Ala	Lys Glu 25 Val Trp Phe Gln Thr 105 Pro Asn	Pro 10 Glu Pro Phe Phe Ile 90 Thr Gly	Glu Ile Leu Gly 75 Ile Lys Pro Gly Phe	Asp Thr Gly 60 Tyr Thr Leu Phe Ala 140	Glu Asp 45 Met Arg Leu Arg Asn 125 Gly	Asn 30 Asp Val Ser Pro Leu 110 Met	15 Asp Pro Ser Asn Leu 95 Pro Lys Ala	Ser Cys Pro 80 Gly Gly Glu Tyr Leu
237 238 239 241 242 244 245 247 248 250 251 253 254 256 262 263 265 265	<pre><400 Met 1 Ser Pro Leu Val 65 Leu Lys Thr His Ala 145</pre>	D> SI Val Lys Ile Pro 50 Val Thr Leu Asn Val 130 Thr	GQUEN Gly Ile Glu 35 Val Leu Val Met Trp 115 Leu Ser	Val 20 Glu Leu Ala Ser Ala 100 Ser Ile	Jeu 5 Ile Val Thr Phe Ser 85 Thr Cys Thr Leu	Glu Ala Arg Phe Val 70 Val Thr Ser Ile Thr 150	Val Asp Leu Arg 55 Asn Val Leu Leu Phe 135 Ile	Ser Glu Thr 40 Thr Asn Ala Pro Asn 120 Ala Val	Lys Glu 25 Val Trp Phe Gln Thr 105 Pro Asn Lys	Pro 10 Glu Pro Phe Phe Gly Thr Ala	Glu Ile Leu Gly 75 Ile Lys Pro Gly Phe 155	Asp Thr Gly 60 Tyr Thr Leu Phe Ala 140 Tyr	Glu Asp 45 Met Arg Leu Arg Asn 125 Gly His	Asn 30 Asp Val Ser Pro Leu 110 Met Gly Arg	15 Asp Pro Ser Asn Leu 95 Pro Lys Ala Asn	Ser Cys Pro 80 Gly Gly Glu Tyr Leu 160
237 238 239 241 242 244 245 247 248 250 251 253 254 256 267 262 263 265 266 268	<pre><400 Met 1 Ser Pro Leu Val 65 Leu Lys Thr His Ala 145</pre>	D> SI Val Lys Ile Pro 50 Val Thr Leu Asn Val 130	GQUEN Gly Ile Glu 35 Val Leu Val Met Trp 115 Leu Ser	Val 20 Glu Leu Ala Ser Ala 100 Ser Ile	Jeu 5 Ile Val Thr Phe Ser 85 Thr Cys Thr Leu Ala	Glu Ala Arg Phe Val 70 Val Thr Ser Ile Thr 150	Val Asp Leu Arg 55 Asn Val Leu Leu Phe 135 Ile	Ser Glu Thr 40 Thr Asn Ala Pro Asn 120 Ala Val	Lys Glu 25 Val Trp Phe Gln Thr 105 Pro Asn Lys	Pro 10 Glu Pro Phe Phe Gly Thr Ala Gln	Glu Ile Leu Gly 75 Ile Lys Pro Gly Phe 155	Asp Thr Gly 60 Tyr Thr Leu Phe Ala 140 Tyr	Glu Asp 45 Met Arg Leu Arg Asn 125 Gly His	Asn 30 Asp Val Ser Pro Leu 110 Met Gly Arg	15 Asp Pro Ser Asn Leu 95 Pro Lys Ala Asn	Ser Cys Pro 80 Gly Gly Glu Tyr Leu 160
237 238 239 241 242 244 245 247 248 250 251 253 254 256 262 263 265 266 268 269	<pre><400 Met 1 Ser Pro Leu Val 65 Leu Lys Thr His Ala 145 Asn</pre>	D> SI Val Lys Ile Pro 50 Val Thr Leu Asn Val 130 Thr	GQUEN Gly Ile Glu 35 Val Leu Val Met Trp 115 Leu Ser Ala	Val 20 Glu Leu Ala Ser Ala 100 Ser Ile Ile	Jeu 5 Ile Val Thr Phe Ser 85 Thr Cys Thr Leu Ala 165	Glu Ala Arg Phe Val 70 Val Thr Ser Ile Thr 150 Met	Val Asp Leu Arg 55 Asn Val Leu Leu Phe 135 Ile Leu	Ser Glu Thr 40 Thr Asn Ala Pro Asn 120 Ala Val Leu	Lys Glu 25 Val Trp Phe Gln Thr 105 Pro Asn Lys Val	Pro 10 Glu Pro Phe Phe 11e 90 Thr Gly Thr Ala Gln 170	Glu Ile Leu Gly 75 Ile Lys Pro Gly Phe 155 Thr	Asp Thr Gly 60 Tyr Thr Leu Phe Ala 140 Tyr Thr	Glu Asp 45 Met Arg Leu Arg Asn 125 Gly His	Asn 30 Asp Val Ser Pro Leu 110 Met Gly Arg	15 Asp Pro Ser Asn Leu 95 Pro Lys Ala Asn Leu 175	Ser Cys Pro 80 Gly Gly Glu Tyr Leu 160 Gly

RAW SEQUENCE LISTING DATE: 01/15/2002 PATENT APPLICATION: US/09/914,541 TIME: 13:04:25

Input Set : A:\09914541.app

Output Set: N:\CRF3\01152002\I914541.raw

272				100					185					190		
272	14-4	m ~~	Лхх	180	21-	3 an	T ou	17. 1		17n 1	Com	T 011	Dho		ת 1 ת	Leu
	мес	ттр		PIO	Ата	ASII	Leu	200	GIII	Val	Ser	Leu	205	AIG	нта	Leu
275	77.5 -	01. .	195	C1.	c1	T	7		c1	T 0	<i>a</i> 15	mbs		Т он	7 ma	Dho
	HIS		гаг	GIU	GIU	гĀЗ	215	GIU	GIY	гуу	GIII	220	гуѕ	ьeu	Arg	Pile
278	Db.	210	T1 a	17. 1	nh a	Dh a		C	nha	mh m	Ш		т1 о	v- 1	Dmo	C1
		Leu	ire	Val	Pne		Leu	Ser	Pne	THE	235	туг	тте	Val	Pro	
	225	.	Dl	D	a	230	0	m	T	0		77 - 7	a		т1 "	240
	Tyr	Leu	Pne	Pro		ire	ser	Tyr	Leu		Pne	vaı	Cys	ттр	Ile	тгр
284	1	_	_		245		-	-1	- 1	250		a 1	.	***	255	.
	Thr	Arg	Ser		Thr	Ala	Gin	GIn		GTĀ	ser	GLY	Leu		Gly	Leu
287			~ 1	260		~ 1	_	_	265	_	-1	1		270	51. .	- -
	Gly	He	_	Ser	Phę	GLY	Leu		Trp	ser	Thr	vaı		GTĀ	Phe	ьeu
290		_	275	_			_	280	_,				285	_	-1	~ 1
	GLY		Pro	Leu	Ala	Val		Phe	Phe	Ala	He		Asn	Ser	Phe	GLY
293		290			_,	_,	295		1	_	_	300	-1	_	_	
	-	Phe	ITe	ITe	Phe		Tyr	ITe	He	Leu		тте	Pne	Tyr	Trp	
	305					310	_		_		315	_,	_		_	320
	Asn	Ala	Tyr	Glu		Lys	Lys	Phe	Pro		Tyr	Thr	Ser	His	Pro	Phe
299					325	_	_	_	_,	330	_		_	_	335	_
	Asp	His	Thr	-	Gln	Arg	Tyr	Asn		Thr	Arg	Ile	Leu		Gln	Lys
302				340					345				_	350	_	_
	Thr	Phe		Ile	Asp	Leu	Pro		Tyr	GLu	Ser	Tyr		Lys	Leu	Tyr
305			355			_		360				_	365	- •		
	Leu		Ile	Leu	Phe	Ala		Ile	Tyr	Gly	Leu		Phe	GLY	Thr	Leu
308		370	_,		_		375		_	_,	_	380	_	_1	- 1	_
		Ala	Thr	Ile	Ser		Val	Ala	Leu	Pne		GLY	Lys	Phe	Ile	
	385	_	_	_	_	390	_,	_	-1		395	_	_	-1	a 1	400
	GLu	Leu	Trp	Lys	_	Ala	Thr	Leu	Thr		Lys	Asp	ьуs	Pne	Gly	Asp
314		1	1	_	405		_	_	_	410	_	-1		_	415	
	vaı	HlS	Thr	-	Leu	Met	ьуs	ьys		ryr	ьys	GIU	vaı		Gln	Trp
317		D1	**- 1	420	**- 1	.			425	D1	17- 1	.	. 1 -	430	W	214
	Trp	Pne		Ата	vaı	Leu	Ата		ser	Pne	vaı	Leu		Leu	Tyr	Ala
320	G	a1	435	Dl	a 1	T	a 1-	440	a1	T	D		445	a 1	T	T a
	Cys		GLY	Pne	GTA	гàг		rea	GIII	ьeu	PIO		ттр	СТА	Leu	ьeu
323	T	450	C		T1.	.1.	455	mh	nh -	mb	T	460	т1.	C1	17.5.1	т1.
		Ala	Cys	Ата	тте		Pne	Thr	Pne	THE	475	PLO	тте	СТА	Val	480
	465	310	mh	m b	3	470	7	Wat	~1	T 0		17-1	т1.	Com	C1.,	
	Leu	Ala	Thr	Thr		GIN	Arg	мет	GIY		ASII	val	TTE	ser	Glu 495	ьец
329	71	T1.	G1	Dh a	485	П	D=0		T	490	T 0.11	7 J a	7.00	17.1		Phe
	TTE	тте	GIY		ren	туг	PIO	СТА	_	PLO	Leu	Ата	ASII		Ald	Pne
332	T	mh	m	500	a	17- 1	a	T1.	505	01-	» 1 a	т о	Ш	510	1701	C1
	гàг	THE	_	GIY	ser	vaı	ser		Ald	GIII	Ald	Leu	_	Pile	νат	Gly
335	3	Dh.	515	*	a1	TT	m	520	T	т1.	D	Dwa	525	Com	Ma+	Dho
			ьys	Leu	GIY	HIS		мес	гÀг	116	Pro		Arg	ser	Met	Pne
338		530	C1-	т с	17-1	71.	535	т1 ^	\7.7 1	λl -	C.~	540	17-1	C.~	Dha	C1
		AgT	GTD	Leu	٧d⊥		THI	тте	val	нта	555	I III.	val	261,	Phe	
	545	mh	П	П	T 4	550	C ~ ~	C.~	W-1	c1		т1 -	C	λ c ~	mh∽	560
	THE	THE	тrр	тrр		ьeu	ser	ser.	VdI		ASII	тте	Cys	ASII	Thr	Asp
344					565					570					575	

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

DATE: 01/15/2002

PATENT APPLICATION: US/09/914,541

TIME: 13:04:26

Input Set : A:\09914541.app

Output Set: N:\CRF3\01152002\I914541.raw

 $L\!:\!2570~M\!:\!341~W\!:$ (46) "n" or "Xaa" used, for SEQ ID#:24

L:2599 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:26 L:2599 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:26

L:2599 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26